

SEQUENCE LISTING

<110> University of Maryland Biotechnology Institute

<120> Assay for Perkinsus in Shellfish

<130> 0432.025

<140>

<141>

<150> 08/900,117

<151> 1997-07-25

<150> 60/023,345

<151> 1996-07-26

<160> 18

<170> PatentIn Ver. 2.1

<210> 1

<211> 1150

<212> DNA

<213> Perkinsus marinus

<400> 1

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actagtgaac atagttata acattgtcca aggggtggag ggggatgcgc gaaatcgatg 180
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caccaaaatg gtctaaatct gcgcattcca tttaagtgaa tttaagtgaa atttaagtga 420
attttactta aaattgacct ttttcgttgc gcagatttgg ggtggtgatg ggtgacgcgg 480
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tgatgcaatc 1150

<210> 2
<211> 1550
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> The nucleotide sequence of the NTS of rRNA of
p.andrewsi, isolated from *Macoma balthica*

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cacaattct ccaaattggac aacattggac aaaaattcac aacatacatt ggacaacagt 180
ggacaacgaa cccaaacccg acaacattgt ccaggggat agggggtgaa aaagcagtgc 240
cgccaaagtc gaaagatgtc aagttgaat gcggctcaaa ttgcattt gtgtaaatcc 300
gcaattttgc caatgtgcaat tttgcaaat gtcaatttt gcaaattgtgc aattttgcca 360
atgtgcaatt ttgcaaatgc gcaattttgc aaatccgcaat tttgcaaat gtcaatttt 420
gaaaaatcac caaatgaaaa tcgtccaagt cgaattggag gcgtggtgac atggtcccgg 480
gatccccctgg ttacagtggaa caatatccca gcaatattcg ctgttaattt gagtttcgct 540
gttttgc当地 attttgagtc tgaaaaaaaaa aattgcaaat ggc当地agggg ggtgaaggaa 600
aaaaaaagcac ccccgaaaggtaaaaattccct ttaagtc当地 tgc当地atttgc当地atttgc当地 660
aaaaatgtt gcaatgc当地 tttgttatt tgccggg当地 attgggtgtca aaagttgc当地 720
ggggtggta cacaatgc当地 ggaattgggtt ggaagttgtg tgattaaaa ttggc当地gtgt 780
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agcatcg当地 ttataataa atatttataa tttagtatct ttatttataa ttgc当地gtc当地 960
caatcaccat tttagaattt ttat当地ttttt atgttttagt gaccggg当地 tttttgc当地 1020
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cacctgcaaa tt当地ataacag gatttgc当地atg atgc当地agc当地gac tgaccggg当地 ttgtt当地ataa 1320
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attgc当地acatt ttgc当地gtata taaacgtgat catctgagca cgcttgc当地act cttggatatc 1500
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<210> 3
<211> 1413
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> The nucleotide sequence of the NTS of rRNA of
Perkinsus mackini, isolated from Mercenaria
mercenaria

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gcctgcctgc ccacccgaaa tgcccgaaat gcccgttaga aaaagtatgc gaaaagttct 120
tgtcaatttt gacagtgtgt gaaaaaaactg aaaaagtcca ctcaacattg cattatgcaa 180
tttgcactc aacattgtcc agggggatag ggggtgaaaa agtatcgag tccaaactgaa 240
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cgaatttggc actcggtgac atgatcggga atttccctgg ttacagtggc caaatccag 360
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tttcaactt gcgcaaaggg gtcaaggaa aaaaaagcac cctcaaaagg aaatttcct 480
ttaatccct ttgaaaaaaaaa tgcgcaaagt taaatttgcg aaaatttgcg ttttctata 540
tgaccgatta gttgtgcca gatggtagtc gggatggta cacggtgcac ggaactcggt 600
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caaatttgcg aaaaaagcag cgccaaagt taaatttgcg gaaaatttgcg ttccaggtcg 720
gtgcgcaaat ttgggtgaa aaagtggta cagcatcaga attataataa ataatctata 780
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tgaagtgttt tgggtattcg gcagctgcca attcggtcag ggTTGAATAT actaacattt 1020
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atcgtgttag tagtgcgac tcttggcgtg aaccggaaaga ccggaaacttgc atttcgacta 1260
tttacgtccg taacacgtcc gtaaaacagga gatttcaaga atattgcaca ttttggta 1320
tataatcgtag atcatctgag cacgcttcga ctcttgaata tttgttaaac aaccgatatt 1380
cgggagctcg caagcattgc aattgtatgc atc 1413

<210> 4
<211> 20
<212> DNA
<213> Perkinsus marinus

<220>
<223> Forward primer

<400> 4
cacttgtatt gtgaaggcacc 20

<210> 5
<211> 21
<212> DNA
<213> Perkinsus marinus

<220>
<223> Reverse primer

<400> 5
gtcatttgga gatgtcacca a

21

<210> 6
<211> 20
<212> DNA
<213> Perkinsus marinus

<220>
<223> Forward primer

<400> 6
atgctagccc atagaacagt

20

<210> 7
<211> 20
<212> DNA
<213> Perkinsus marinus

<220>
<223> Reverse primer

<400> 7
atgctagccc acatcacagc

20

<210> 8
<211> 22
<212> DNA
<213> Perkinsus atlanticus

<220>
<223> Forward primer

<400> 8
atgctatggg tggttgcgga cc

22

<210> 9
<211> 20
<212> DNA
<213> Perkinsus atlanticus

<220>
<223> Reverse primer

<400> 9
gtagcaagcc gtagaacagc

20

<210> 10
<211> 24
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> NTS7 forward primer for *Perkinsus andrewsi*

<400> 10
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24

<210> 11
<211> 20
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> NTS6 reverse primer for *Perkinsus andrewsi*

<400> 11
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20

<210> 12
<211> 19
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> Generic forward primer PER1 for *P.marinus*,
P.atlanticus and *P.andrewsi*

<400> 12
tagtacccgc tcattgtgg

19

<210> 13
<211> 17
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> Generic reverse PER2 primer for *P. marinus*, *P.*

atlanticus and P. andrewsi

<400> 13

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17

<210> 14

<211> 22

<212> DNA

<213> Perkinsus sp.

<220>

<223> Forward SSU3F primer for P. andrewsi

<400> 14

agttggattt ctgccttggg cg

22

<210> 15

<211> 22

<212> DNA

<213> Perkinsus sp.

<220>

<223> Forward SSU4F primer for P.andrewsi

<400> 15

accaggtcca gacataggaa gg

22

<210> 16

<211> 712

<212> DNA

<213> Perkinsus sp.

<220>

<223> A nucleotide sequence of the ITS1-5.8. S ITS2
regions of P.andrewsi

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tgttagatc cccacacactg accgctttaa cgggccgggt aggtgcataa cttctatgaa 120
ccaattgtac tagtctaaag tatccaatat cctttggat ttgggtattt caaaacgaaa 180
ttcccaaactc tcaacgatgg atgcctcggc tcgagaatcg atgaaggacg cagcgaagtg 240
cgataaggcac tgcatgttgc agaattccgt gaaccagtag aaatctcaac gcatactgca 300
caaaggggat ttatcctctt tgtacataca tatcagtgtc gctcttcttc ccgataacaa 360
catttgttg attacaatc aacattatgc tttgtatccc gcttggattc ctattattggg 420
atccgctgtg tgcatgttgc gacacaggcg catatatttgc caaggctata atactactgt 480

actgtagccc cttcgcaaga aggactgcgc tagtgagtat ctttggatgc tcgcgaactc 540
gactgtgtg tggttgattc cgtttccctc gatcacgcga ttcatcgctt caacgcatta 600
tgtcaaattt gatgaatgca gagagttgtt tatgaattac gogatcgctt tggctcaga 660
atcgttacta tagcacgctt gtcggttgc aacctggcaa tatgtcatca tt 712

<210> 17

<211> 1808

<212> DNA

<213> Perkinsus sp.

<220>

<223> A nucleotide sequence of the SSU rRNA of
P.andrewsi

<400> 17

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acagggcaat tctgtcttg aatttggaaat agtagatttt aaatctttt acgagttatca 540
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aagttgtgc ggtaaaaag ctcgttagtt gatttctgc ttgggcgacc ggtccacctt 660
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caagcaggt tatgccgtga atacatttagc atgaaataat aggatatgac tttggtcata 840
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gtgagctgtc cggactgcga ttagttcagt ttctgttctt ttgcggaa gttctgcataa 1740
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gatcattc 1808

<210> 18
<211> 1147
<212> DNA
<213> *Perkinsus atlanticus*

<220>
<223> A nucleotide sequence of the NTS of rRNA of *P.*
atlanticus

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tgcaatc

1147